

**ABSTRACT**

A pressure sensor 10 comprises an upper substrate 30 having a detection face 30A, a diaphragm 20 provided with a space from the detection substrate 30 and displaceable to and from the upper substrate 30, fixed electrodes 32, 33 provided on the  
5 detection face 30A of the upper substrate 30, and a first signal fetching section 22 electrically connected to the diaphragm 20, and the diaphragm 20 is formed by dry-etching single-crystal silicon with the specific resistance lowered to  $1.0 \Omega \cdot \text{cm}$  or below by mixing dopant lowering the resistance value.